What is claimed is:

1. A method to create a digital model of a patient's teeth, comprising:

taking an impression of the patient's teeth using a dental tray containing a radiopaque agent; scanning the impression and the dental tray using a radiographic source; and

generating the digital model with scanned data.

2. The method of claim 1, further comprising passing a radiation source through a scintillator.

3. The method of claim 2, further comprising digitizing the output of the scintillator.

4. The method of claim 1, wherein the impression of the teeth is taken in a dental tray having detachable portions.

5. The method of claim 1, further comprising taking a bite impression of the patient

6. The method of claim 5, wherein the bite impression is taken using a PVS material

7. The method of claim 5, wherein the bite impression is taken using a wax bite.

8. The method of claim 1, wherein an upper teeth impression, a lower teeth impression and a bite impression is scanned together.

9. The method of claim 8, further comprising digitally reversing data from the upper and lower impression scan data to make positive data.

10. The method of claim 9, wherein the digital reversing identifies inner surfaces of an impression material and extracting the inner surfaces using a largest connected component algorithm.

11. The method of claim 1, further comprising aligning data into a bite position using the bite material scanned.

12. The method of claim 1, further comprising digitally detailing the teeth data.

13. The method of claim 1, further comprising setting a final bite.

14. The method of claim 1, further comprising articulating the digital model.

15. A system to create a digital model of a patient's teeth, comprising:

a dental tray containing a radiopaque material adapted to take an impression of the patient's teeth;

a radiation source;

a scintillator to receive the radiation from the radiation source;

a radiation detector coupled to the scintillator;

a rotatable table positioned between the radiation source and the scintillator, the table being adapted to support the dental tray with the impression of the patient's teeth; and a computer coupled to the detector to generate the digital model with scanned data.

16. The system of claim 15, wherein the radiation source is an X-ray source.

17. The system of claim 15, wherein the radiation source is a computed tomography source.

18. The system of claim 15, wherein the rotatable table is adapted to support an upper teeth impression, a lower teeth impression and a bite impression.

19. The system of claim 15, further comprising a fabrication machine coupled to the computer to generate a plurality of appliances, wherein the appliances comprise polymeric shells having cavities and wherein the cavities of successive shells have different geometries shaped to receive and resiliently reposition the teeth from one arrangement to a successive arrangement.

20. The system of claim 15, wherein the dental tray comprises:

a base having a plurality of prongs, the base having one or more openings to allow flowing of the dental impression material;

a first wall extending from one side of the base, the first wall having one or more openings to allow flowing of the dental impression material; and

at least one detachable portion formed on one end of one prong, the detachable portion being removable to shorten the prong length.